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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/046,176

01/16/2002

Youichi Hasegawa

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06/09/2004

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EXAMINER

NGUYEN, DONGHAI D

ART UNIT

PAPER NUMBER

3729

DATE MAILED: 06/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                                 |  |
|------------------------------|-------------------------------|---------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/046,176 | Applicant(s)<br>HASEGAWA ET AL. |  |
|                              | Examiner<br>Donghai D. Nguyen | Art Unit<br>3729                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 11-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/12/02</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I, claims 1-10, in Paper received on February 03, 2004 is acknowledged. The traversal is on the ground(s) that "the search and examination of the entire application could be made without serious burden. This is not found persuasive because Groups I, II, III having different utility and the search for Group I does not require the step of tightly fitting the terminal ends to the lead wire; the search for Group II does not require the steps of bending a lead wire and/or inserting the sleeve to a housing; and the search of Group III does not require the step of molding the sleeve.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4-10 are rejected under 35 U.S.C. 102(b) as being anticipated by 5,309,054 to Yamamoto et al.

Regarding to claim 1, Yamamoto et al disclose a method of assembling a lead wire of a starter comprising steps of: bending a lead wire (21) to form a first bent portion and a second bent portion (21a); integrally molding (Col. 5, lines 43-48) a sleeve (13 and 14) with the lead wire so as to tightly fix to the second bent portion of the lead wire; and inserting an end of the

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sleeve facing to the first bent portion of the lead wire to a housing (3/5) of the starting motor so as to seal an outer periphery of the sleeve and an insertion portion of the housing (see Fig. 2A).

Regarding claim 4, Yamamoto et al disclose the step of welding an end (21a) of the second bent portion to a terminal (Col. 4, lines 61-62).

Regarding claims 5-8, Fig. 2A shows the sleeve (14) to leave a clearance between the first bent portion of the lead wire and the sleeve; to have a projection at a part which faces the first bent portion of the lead wire; to have accordion structure at a part which faces the first bent portion of the lead wire; and a thin wall portion (14) at a part which faces the first bent portion of the lead wire.

Regarding claim 9, Fig. 1 shows the step of connecting the terminal to the magnet switch (16) at a same time as inserting the end of the sleeve into the housing (3).

Regarding claim 10, Yamamoto et al' Fig. 2A shows the lead wire having a substantially V-shape to connect the magnet switch and the housing of the starting motor.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al in view of JP No. 3009069 to Hasegawa.

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Yamamoto et al do not disclose the step of inserting an O-ring between the outer periphery of the sleeve and the housing proximate to the insertion portion to seal there between and the step of integrally molding the O-ring with the sleeve. However Hasegawa teaches the steps of inserting the o-ring (16) between the sleeve (13) and the housing and integrally molding the o-ring (16) with the sleeve (13, Figs. 7-8) for insulating and waterproof of the lead wire (Abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Yamamoto et al to have the steps of the steps of inserting the o-ring between the sleeve and the housing and integrally molding the o-ring with the sleeve as taught by Hasegawa for insulating and waterproof of the lead wire.

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donghai D. Nguyen whose telephone number is (703) 305-7859. The examiner can normally be reached on Monday-Friday (9:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter D. Vo can be reached on (703) 308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DN

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke, positioned above the printed name.

**PETER VO**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 3700**